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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,067

05/31/2006

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EXAMINER

BOES, TERENCE

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,067	Applicant(s) SCHWENDEMANN, FRANZ	
	Examiner TERENCE BOES	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/31/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Germany on 2/17/04 and 3/12/04. It is noted, however, that applicant has not filed a certified copy of the German applications as required by 35 U.S.C. 119(b). The examiner notes that although the PCT application has been made a part of the file wrapper, the parent German applications have not been received.

Claim Objections

2. Claim 5 is objected to because of the following informalities: the recitation "...and in particular..." is generally idiomatic in nature and is therefore inappropriate claim language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with grammatical errors and indefinite language to numerous to list in their entirety. What follows are a few examples. The examiner suggests rewriting the claims to correct for grammatical errors and indefinite language.

Claim 1 recites both "...the motor vehicle having..." and "...the rotor shaft characterized in that...", rendering the claim indefinite. It is unclear as to where within the claim the preamble ends and the body begins.

Claim 1 recites the limitation "...in particular for...", rendering the claims indefinite. The resulting claim does not clearly set forth the metes and bounds of the patent protection desired. It is unclear whether such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims.

Claim 3 recites the limitation "...in particular on...", rendering the claims indefinite. The resulting claim does not clearly set forth the metes and bounds of the patent protection desired. It is unclear whether such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required

feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 6 recites the broad recitation "...a radial bump...", and the claim also recites "...knurling or a serration..." which is the narrower statement of the range/limitation.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation "...has a radius...", and the claim also recites "...spherical..." which is the narrower statement of the range/limitation.

Claim 6 recites the limitation "the bore" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the radial bump" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the end next to the bottom face" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the bore" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the radial bump" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "...and can be axially mounted through a bearing sleeve...", rendering the claim indefinite. It is unclear if applicant is positively reciting "axially mounted through a bearing", or is merely implying the possibility of being axially mounted.

Claim 9 recites the limitation "the connection of the rotor shaft to the toothed element" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the region" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the radial bump" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the region" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, and 6-10, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Racz US 2,932,975.

Racz discloses:

- the toothed element (14) has an axial bearing face (see 24 and bearing face in figure 9), which rests on one of the face ends of the rotor shaft (30)
- the axial bearing face is located on a bottom face of a bore (23) in the toothed element.
- the toothed element (14) has an axial bracing face (see face of toothed element at 18), by way of which the rotor shaft (30) is braced on the housing in particular on an adjusting element (15 is capable of being adjusted).
- the axial bracing face (18) has a radius and is embodied in particular as a spherical surface (18 is a sphere).
- a through opening (23) is integrally formed onto the bottom face of the bore
- the rotor shaft has a radial bump (39, or 31) - in particular knurling or a serration (39) - in an axial portion, which bump, upon introduction into the bore of the toothed element, forms a force- and/or form-locking connection that is fixed against relative rotation.

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- the axial region of the radial bump of the rotor shaft in particular at the end next to the bottom face the bore has a lesser inside diameter than in regions (84) of the rotor shaft (18) that are without radial bumps (see tapered cavity 22).
- the rotor shaft, after the integral forming on of the radial bump, is through-ground, and can be axially mounted through a bearing sleeve (33) in the housing (10) (additionally, product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113).)
- the connection of the rotor shaft to the toothed element in the region having the radial bump is embodied as a press fit, and in the region without radial bumps, it is embodied as a clearance fit (see tapered cavity 22 showing contact at 39 as in figure 4-7, and 8, but also with clearance as in figures 1, 3 and 8).
- the toothed element (14) has a worm gear (13), a cone wheel toothing, or a straight or oblique pinion toothing, which meshes with a further gear element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Racz US 2,932,975 in view of J. Pickles US 2,781,191.

Racz discloses a worm gear bearing. Racz does not disclose an opening integrally formed onto a bottom face of a bore and in particular receiving a ball. J. Pickles teaches an opening integrally formed onto a bottom face of a bore and in particular receiving a ball (45). Because both Racz and J. Pickles teach worm gear transmission bearings, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an opening integrally formed onto a bottom face of a bore and receiving a ball to achieve the predictable result of axially supporting a worm gear.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERENCE BOES whose telephone number is (571)272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. B./

Examiner, Art Unit 3682

7/23/08

/Richard WL Ridley/

Supervisory Patent Examiner, Art Unit 3682